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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,877	07/18/2003	Chung Ching Lip		1734
62226	7590	11/15/2007		
LIP CHUNG CHING UNIT 3A, 8 COX BLVD. MARKHAM TORONTO, ON L3R-4G1 CANADA			EXAMINER YAN, REN LUO	
			ART UNIT 2854	PAPER NUMBER
			MAIL DATE 11/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/621,877

Applicant(s)

LIP, CHUNG CHING

Examiner

Ren L. Yan

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-11, 19, 23 and 25-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-18, 20-22 and 24 is/are rejected.
- 7) ☒ Claim(s) 12-18, 20-22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election without traverse of Fig. 53 species with readable claims 12-25 in the reply filed on 8-24-2007 is acknowledged.

Upon careful review of the elected claims 12-25, it is the position of the Examiner that claim 19 does not read on the Fig. 53 species because the recited structural features in claim 19 can not be readily identified with respect to Fig. 53 species (Figs. 53-57). Claims 23 and 25 also are not supported by Fig. 53 species. Accordingly, claims 19, 23 and 25 have been withdrawn from further consideration as being directed to non-elected inventions and elected claims 12-18, 20-22 and 24 are currently under consideration.

Claims 12-18, 20-22 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claimed encoding means for sensing movements of the first and second members, communication means for transferring signals from the encoding means to a host computer and modification means for changing the functions the host computer performs are not sufficiently disclosed nor illustrated so as to enable one of ordinary skill in the art to make and use of the invention. There is no description or illustration in the original disclosure with respect to the Fig. 53 species as to how the movements of the first and second members are detected and their positions in the form of electrical signals are transferred to a host computer. There is no structure provided for the Fig. 53 species as the modification means for changing the functions the host computer performs

based on the movements of the first and second members. The Fig. 53 species only provides an electrical wire 417 to connect the claimed position encoder system to a host computer which can only be interpreted as the wire to transmit a signal to the host computer when the button 405 is pressed the same way as a conventional wired computer mouse does. With respect to claim 24, there is no description or illustration provided by the original disclosure as to how the button can be rotated to 3 different positions and to function as a conventional 3-buttons computer mouse since there are no sensors and contacts of any kind being provided.

Claims 12-18, 20-22 and 24 are objected to for the following reasons:

In claim 12, the preamble of "Method and apparatus of a position encoder system for a computer" is objected to because it crosses the two statutory classes and it made the claim unclear as to whether claim 12 is directed to a method or to an apparatus. Since the body of claim 12 is clearly drawn to an apparatus, it is suggested that the preamble of claim 12 be changed to read "A position encoder system for a computer". Also in claim 12, lines 4 and 6, the recitation of "a reference base" should be changed to -- the reference base -- , respectively, so as to be consistent with the reference base recited earlier in the claim. On line 14 of claim 12, the word "limit" should be changed to -- limited -- to correct a grammatical error.

In claims 16-18 and 22, the recitations of "a base" and "said base" should all be changed to -- said reference base -- so as to avoid any confusion which base it is referring to.

Claim 20 is also objected to because the reference made to the position of the elongated indented area on the first member relative to an operator is improper since the claimed invention is directed to a position encoder system per se and a human operator does not form any part of the claimed invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Soma(US Pat. No. 5,327,162).

The patent to Soma teaches the structure of a position encoder system for a computer as claimed comprising: a first member 23 or 24 movably in a first direction X or Y relative to a reference base 21; a second member 52 movably in a second direction X or Y relative the reference base, said second member 52 movable in said first direction X or Y causing said first member 23 or 24 moving in said first direction relative to the reference base; encoding means (various detecting elements provided) for sensing movements of said first member relative to the reference base, and movements of said second member relative to the reference base, thereby providing indicative signals to a host computer positional and directional information of said first and second members; communication means for transferring signals from said encoding means to a host computer in the form of a cursor on the display of the computer; modification means for changing the functions the host computer performs base on the movements of said first and second members when the second member 52 is pressed, including but not limited to changing the host computer to do nothing base on the movements of said first and second members when the second member 52 is not pressed; said first and second directions together covering a region in the Cartesian plane as shown by arrows X and Y. See Figs. 1-11 and the abstract of Soma for details.

With respect to claim 13, Soma teaches the second member 52 movably in said second direction mounted on said first member as shown in Fig. 2.

With respect to claim 14, Soma teach the first member having one side with a first indented area 41 or 44; said second member being movably engaged in said first indented area on said first member thereby said second member movable in said second direction along the length of said indented area of said first member.

With respect to claim 16, Soma teaches the reference base 21 with a second indented area 25; said first member 23 and 24 being movably engaged in said second indented area of said base thereby said first member movable in said first direction along the length of said second indented area of said base.

With respect to claim 17, Soma teaches the second indented area on said base being a first elongated indented area and said first member having a protrusion 42a or 42b movably mounted on said first elongated indented area thereby said first member movable along the length of said first elongated indented area.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soma in view of a conventional computer mouse.

Soma teaches all that is claimed including the second member 52(button) being pressed serving as the same function as pressing the button 1 of a conventional computer mouse.

However, Soma does not teach that the button 52 can be rotated serving the same function as rotating the scroll button in a conventional computer scroll mouse. Since as admitted by the applicant that a computer scroll mouse having a scroll button is conventional known for carrying out a known computer related function, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the button 52 of Soma with the capability of being rotated as taught by the conventional computer scroll mouse in order to facilitate the display page scroll up and down function for the user.

Claims 18, 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soma.

With respect to claim 18, Soma teaches all that is claimed except for the second indented area 25 on said reference base 21 being a rectangular indented area and said first member movably mounted on said rectangular indented area thereby said first member movable in the direction along the length of said rectangular indented area. It has been held by the Court that a mere change in shape of a structural element without changing the functionality of the structural element would have been an obvious design choice by one of ordinary skill in the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (The court held that the configuration of the claimed disposable plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.). In the present invention, since Soma shows the second indented area 25 to be pretty much square in shape, it should be apparent to

those skill in the art that the indented area 25 could be functioning just as well if it were rectangular in shape. Accordingly, it would have been obvious to those skilled in the art to provide the second indented area 25 with a rectangular shape as a mere design choice with altering the functionality of such an area.

With respect to claim 20, Soma teaches the first member 56(Figs. 5 and 6) being an elongated tubular structure having one end 58 movably engaged on one side of said rectangular indented area and another end movably engaged on the opposite side of said rectangular indented area thereby said elongated tubular structure movable within said rectangular indented area along the direction of the sides of said rectangular indented area being engaged.

With respect to claim 21, Soma teaches in Fig. 2 the rectangular indented area having 2 walls 26 depressed inwardly into said base on 2 opposite sides of said rectangular indented area, an elongated indented area being positioned on each of said 2 walls, said first member 23 having one end with a protrusion movably engaged on said elongated indented area of one of said 2 walls and another end with a protrusion movably engaged on said elongated indented area of the other of said 2 walls.

With respect to claim 22, Soma teaches in Figs. 5 and 8 the communication means including connection means such as electricity wires passing through said indented area on said first member and said indented area on said base.

Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, providing the above rejection under 35 USC 112, first paragraph was overcome in applicant's next response to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ren L Yan
Primary Examiner
Art Unit 2854

Ren Yan
Nov. 7, 2007